We Claim:

1. A heater fan with integrated flow control element comprising;
   a. A primary fan;
   b. A secondary fan, mounted a distance from and in series with said primary fan;
   c. A integrated flow control element mounted between said primary fan and said secondary fan;
   d. A shroud, said shroud directing the output of said primary fan through said integrated flow control element and into said secondary fan; said shroud further directing the combined output into a room;

   Wherein said integrated flow control element is further adapted to add heat to the output of said primary fan as it passes through said integrated flow control element.

2. The heater fan with integrated flow control element as claimed in claim 1 wherein said primary fan and said secondary fan rotate in the same direction.
3. The heater fan with integrated flow control element as claimed in claim 1 wherein said primary fan and said secondary fan rotate in opposite directions.
4. The heater fan with integrated flow control element as claimed in claim 1 wherein said primary fan and said secondary are configured with different motors.
5. The heater fan with integrated flow control element as claimed in claim 1 wherein said primary fan and said secondary have the same motor.
6. The heater fan with integrated flow control element as claimed in claim 1 wherein said integrated flow control element is configured to substantially remove swirl from the airflow before it enters said secondary fan.
7. The heater fan with integrated flow control element as claimed in claim 1 wherein said integrated flow control element is configured to remove heat from the airflow before it enters said secondary fan.
8. The heater fan with integrated flow control element as claimed in claim 1 further comprising an output diffuser, said output diffuser being movably attached to said shroud.

9. The heater fan with integrated flow control element as claimed in claim 1 further comprising an output diffuser, said output diffuser being free to rotate within said shroud, said output diffuser configured to produce a rotating thrust as air leaves said output diffuser.
10. The heater fan with integrated flow control element as claimed in claim 1 further comprising a wick to draw moisture from an external reservoir into the output of said secondary fan.
11. The heater fan with integrated flow control element as claimed in claim 1 wherein said secondary fan is positioned a further distance from said integrated flow control element to reduce acoustic noise.

12. An extended tube fan with integrated flow control element comprising;
    a. A primary fan;
    b. A secondary fan, mounted a distance from and in series with said primary fan;
    c. A integrated flow control element mounted between said primary fan and said secondary fan;
    d. A tube, said tube directing the output of said primary fan through said integrated flow control element and into said secondary fan; said tube further directing the combined output along the length of the tube and into a room;

    Wherein said integrated flow control element is further adapted to add heat to the output of said primary fan as it passes through said integrated flow control element.

13. The extended tube fan with integrated flow control element as claimed in claim 12 wherein said primary fan and said secondary fan rotate in the same direction.
14. The extended tube fan with integrated flow control element as claimed in claim 12 wherein said primary fan and said secondary fan rotate in opposite directions.
15. The extended tube fan with integrated flow control element as claimed in claim 12 wherein said primary fan and said secondary are configured with different motors.

16. The extended tube fan with integrated flow control element as claimed in claim 12 wherein said primary fan and said secondary fan have the same motor.
17. The extended tube fan with integrated flow control element as claimed in claim 12 wherein said integrated flow control element is configured to substantially remove swirl from the airflow before it enters said secondary fan.
18. The extended tube fan with integrated flow control element as claimed in claim 12 wherein said integrated flow control element is configured to remove heat from the airflow before it enters said secondary fan.
19. The extended tube fan with integrated flow control element as claimed in claim 12 further comprising an output deflector, wherein said output deflector being configured to rotate when required.
20. The extended tube fan with integrated flow control element as claimed in claim 12 further comprising a wick to draw moisture from an external reservoir into the output of said secondary fan.
21. The extended tube fan with integrated flow control element as claimed in claim 12 wherein said secondary fan is positioned a further distance from said integrated flow control element to reduce acoustic noise.
22. The extended tube fan with integrated flow control element as claimed in claim 12 wherein said primary fan and said secondary fan may be reversed.
23. The extended tube fan with integrated flow control element as claimed in claim 12 wherein said tube may be reversed.